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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,469	09/25/2003	Motoshi Okugawa	108421-00080	4843
7590	11/03/2005		EXAMINER	
AREN'T FOX KINTNER PLOTKIN & KAHN, PLLC Suite 400 1050 Connecticut Avenue, N.W. Washington, DC 20036-5339			MATZEK, MATTHEW D	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.	10/669,469	Applicant(s)	OKUGAWA ET AL.
Examiner	Matthew D. Matzek	Art Unit	1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1) Responsive to communication(s) filed on 02 August 2005.  
2a) This action is FINAL. 2b) This action is non-final.  
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

4) Claim(s) 1-3,5,6,8,9,11-13 and 15-19 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) Claim(s) \_\_\_\_\_ is/are allowed.  
6) Claim(s) 1-3,5,6,8,9,11-13 and 15-19 is/are rejected.  
7) Claim(s) \_\_\_\_\_ is/are objected to.  
8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

9) The specification is objected to by the Examiner.  
10) The drawing(s) filed on 25 September 2004 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

1) Notice of References Cited (PTO-892)  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/25/03, 2/18/04.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) Notice of Informal Patent Application (PTO-152)  
6) Other: \_\_\_\_\_.

***Response to Amendment***

1. The Amendments filed 7/8/2005 and 8/2/2005 have been fully considered and have been entered into the Record. Claims 4, 7, 10 and 14 have been canceled. Claims 1-3, 5-6, 8-9, 11-13 and 15-19 remain active. The amended claims present no new matter. The previous rejection of claim 4 under 35 U.S.C. § 112 2<sup>nd</sup> paragraph has been withdrawn. If Applicant were to amend the instant claims to include a limitation comprising Japanese Industrial Standard P 8113, a translated copy of said standard will be needed for the Record. The Objection of claim 2 has been withdrawn due to amendment. For purposes of examination, Examination has interpreted that a "paper string" comprises a fiber or string made of wood pulp fibers. The rejections associated with Ayers (US Patent 3,905,863) have been withdrawn as the applied reference is directed a semi-twill monofilament, polymeric fabric, not a paper string fabric.

***Claim Objections***

2. Claim 1 is objected to because of the following informalities: the claim does not end with a period. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-3, 5-6, 8-9, 11-13 and 15-19 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling a paper string reticulated structure (refer to page 6 of the Specification), does not reasonably provide enablement for claimed paper string reticulated structure as defined by the specific desired properties made by materials other than

the ones disclosed in the Specification. The claim is also rejected as the limitation “aspect ratio of tensile strength of the base paper is in the range 5 to 15”, but does not recite a specific test upon which the range limitation is to be based upon. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. The product claims of the present invention are claiming the product by the properties that they are seeking in the reticulated structure. It seems that the applicants are attempting to obtain patent protection on a final product made of a non-existent process that may be made some day in the future, but only provides guidance on how to make the final product by a specifically disclosed process.

The specification does not provide enablement for one of ordinary skill in the art that is reasonably commensurate in scope with the properties sought by the claims.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-3, 5-6, 8-9, 11-13 and 15-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Independent claim 1 recites physical properties of a reticulated structure (i.e. aspect ratio of tensile strength of the base paper in a range from 5 to 15).

5. Ex parte Slob, 157 USPQ states the following with regard to an article claimed by defining property values:

Claims merely setting forth physical characteristics desired in article, and not setting forth specific compositions, which would meet such characteristics, are invalid as vague, indefinite, and functional since they cover any conceivable combination of ingredients either presently existing or which might be discovered in future and which would impart desired characteristics, thus, expression “a liquefiable substance having a liquification temperature from 40°C to about 300°C and being compatible with the ingredients in the powdered detergent composition” is too

broad and indefinite since it purports to cover everything which will perform the desired functions regardless of its composition, and in effect, recites compositions by what it is desired that they do rather than what they are; expression also is too broad since it appears to read upon materials that could not possibly be used to accomplish purposes intended.

6. Thus, claims 1-3, 5-6, 8-9, 11-13 and 15-19 are indefinite for reciting only the desired physical properties of the absorbent composite, rather than setting forth structural and/or chemical characteristics of said reticulated structure.

***Claim Rejections - 35 USC § 102/103***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-3, 5-6, 8-9, 11 and 16-19 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Saito et al. (JP 10001166).

Saito et al. disclose a paper reticulated material that is formed by twisting one or more belt formed paper flaps to form strings and forming a net by knitting the twisted strings in a cross-knitting manner (Abstract). Figure 3 displays a knotless net. The applied invention has a basis weight of 15 to 50 g/m<sup>2</sup> [0014]. Claims 16-19 are rejected as the applied article is directed for use as buffer material against light to heavy impacts [0008].

The strip-shaped paper is made of natural fibers, or natural fibers mixed with synthetic fibers [0031]. The twisted strings of the paper web may be reinforced with wet strength additives [0027]. The applied invention is made of bleached and unbleached kraft pulp fibers as signified by NUKP, LUKP and LBKP [0034, 0037]. Examiner takes the position that these kraft pulps anticipate the instantly claimed softwood kraft pulp.

***Claim Rejections - 35 USC § 103***

9. Claims 12-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al. (JP 10001166) as applied to claims 8, 9 and 11 above, and further in view of Phan et al. (US Patent 6,136,146) or Kearney et al. (US Patent 4,225,382). The invention of Saito et al. is silent as to the use of a specific wet strength-enhancing agent.

a. Phan et al. disclose an air-dried paper web with at least two different regions of different densities and basis weights (Abstract). Examples 1 and 2 utilize softwood kraft pulp within the furnish. The paper furnish may further comprise a variety of additives including wet strength binder materials such as polyamide-epichlorohydrin resins (col. 9, line 62 – col. 10, line 5).

b. Kearney et al. disclose an improved process to produce a novel tissue (Abstract). Examples 1-4 teach the use of softwood kraft pulp in the furnish. In efforts to increase the wet strength of the pulp a modified polyacrylamide resin is added to the neat furnish in Example 1 (col. 13, lines 20-25).

c. Since Saito et al., Phan et al. and Kearney et al. are from the same field of endeavor (i.e. paper webs), the purpose disclosed by Phan et al. and Kearney et al. would have been recognized in the pertinent art of Saito et al..

d. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the article of Saito et al. to have included the wet strength additive of Phan et al. or Kearney et al. The skilled artisan would have been motivated by the desire to use a specific wet strength additive for a paper-based web.

***Response to Arguments***

10. Applicant's arguments filed 7/8/2005 and 8/2/2005 have been fully considered but they are not persuasive.

11. Applicant argues that Saito et al. does not teach the use of softwood kraft pulp. The applied invention is made of bleached and unbleached kraft pulp fibers as signified by NUKP, LUKP and LBKP [0034, 0037]. Examiner takes the position that these kraft pulps anticipate the instantly claimed softwood kraft pulp.

12. Examiner has addressed Saito et al.'s lack of teaching the aspect ratio of tensile strength of the base paper in the art rejections, *supra*.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Matzek whose telephone number is (571) 272-2423. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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**NORCAT TORRES**  
PRIMARY EXAMINER